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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/070,008	07/03/2002	Gilbert Wolrich	10559-311US1	5753
20985	7590	10/16/2006	EXAMINER	
FISH & RICHARDSON, PC P.O. BOX 1022 MINNEAPOLIS, MN 55440-1022			PAN, DANIEL H	
			ART UNIT	PAPER NUMBER
			2183	
DATE MAILED: 10/16/2006				

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/070,008	Applicant(s) WOLRICH ET AL.	
	Examiner Daniel Pan	Art Unit 2183	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 02 August 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-4,6-8,10-14 and 17-26 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-4,6-8,10-14 and 17-26 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 03 July 2000 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date <u>02/28/02, 06/09/04</u> . | 6) <input type="checkbox"/> Other: _____ |

1. Claims 1-4,6-8,10-14,17-26 remain for examination. Claims 5,9,15,16 have been canceled.
2. Claims 1-4,5,6-9,11-14, 17-23 are rejected under 35 U.S.C. 103(a) as being unpatentable over Nakayama (5,928,358) in view of Hasegawa (5,724,563).
3. As to the newly amended claim 1, the newly amended feature of the bit and the register being specified in the branch instruction does not affect the original scope of the bit specified in the branch instruction of a register specified in the branch instruction. Takayama did teach the bit [20b] being specified in the branch instruction (see fig.3 branch instruction format).
4. Claim 10 is rejected under 35 U.S.C. 103(a) as being unpatentable over Takayama (5,928,358) in view of Hasegawa (5,724,563) and as applied to claim 1 above, and further in view of Khim Yeoh et al. (5,274,770).
5. Claims 24-26 are rejected under 35 U.S.C. 103(a) as being unpatentable over Takayama (5,928,358) in view of Hasegawa (5,724,563) and as applied to claims 1, 17, 22 above, and further in view of Chrysos (5,923,872).
6. The rejections are maintained and incorporated by reference the last Office action on 05/08/06.
7. In the remarks, applicant argued that :

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- a) Takayama's branch prediction provided a prediction of whether an instruction stream will branch or not while claim 1 of applicant is directed to executing a type of instruction, i.e. a branch instruction during execution of instruction stream;
- b) applicant's claim is directed to executing a branch instruction that identifies a particular bit location of a particular register whose content (1,0) will determine if branching operation is performed;
- c) Takayama's branch prediction bit does not specify particular bit of a register, but just indicated the expected result of the to-be-evaluated branching condition;
- d) Takayama's prediction bit does not participate the execution of the branch ;
- e) Hasegawa did not specifically teach the executing a branch instruction in execution of an instruction stream with a branch based on a bit of a register being set or clear, the bit and the register being specified in the branch instruction;
- f) Takayama did not disclose that the branch operation itself, which is to be performed by the executing stage, is based on the value of a particular bit of a particular register specified by the instruction that was decoded by decoding unit 14.

8. As to a) above, Takayama clearly taught after execution of the branch instruction, the execution result was compared to the prediction information [40b] specified in the branch instruction [40] (see branch instruction format in fig.1, see col.1, lines 38-57), and further taught the branch instruction included a set of prediction information, and when executed the set of prediction information was updated (see

col.2, lines 47-55). From the above, Takayama did include the executing a branch instruction, not merely a prediction.

9. As to b), Takayama is also directed to executing a branch instruction [20] that identifies a particular bit location [1 bit] of a particular register [20b] whose content (1,0) will determine if branching operation is performed (see col.7, lines 38-51).

10. As to c), applicant only recites "...a bit of a register being set or clear, the bit and the register being specified in the branch instruction...". Takayama's prediction bit [20b] was specified in the branch instruction [20] (see fig.3).

11. As to d), Takayama's prediction bit did participate the execution of the branch (see after execution of the branch instruction in paragraph a) above).

12. As to e), Hasegawa was used to supplement the teaching of specifying number of instructions in the instruction stream (see fig.10, number 3 specified in the branch instruction). The reasons of obviousness were already given in the last Office action in on paragraph 4 on 05/08/06. Therefore, it will not be repeated herein.

13. As to f), applicant never claimed that the branch operation itself, which is to be performed by the executing stage, is based on the value of a particular bit of a particular register specified by the instruction that was decoded. Instead, applicant claimed "executing a branch instruction" and "before performing the branch operation ". No execution stage of the branch operation itself can be found. applicant is reminded that

unclaimed features cannot be used to overcome the prior art (e.g. see CCPA In re Lundenberg & Zuschlag, 113, USPQ 530, 534 (1957)).

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Dan Pan whose telephone number is 571 272 4172. The examiner can normally be reached on M-F from 8:30 AM to 4:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Chan, can be reached on 571 272 4162. The fax phone number for the organization where this application or proceeding is assigned is 703 306 5404.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR.

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Status information for unpublished applications is available through Private PAIR only.

For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

21 Century Strategic Plan

DANIEL H. FAN
PRIMARY EXAMINER
GROUP